

5 WHAT IS CLAIMED IS:

1. A turbocharger control system comprising:
a turbocharger comprising:
 a compressor and turbine attached to opposite ends of a common shaft
 disposed within a center housing, the center housing comprising a bearing
10 assembly disposed around the shaft, and an oil passage to the bearing
 assembly for providing lubricating oil thereto during turbocharger operation,
 an electric motor positioned around the shaft for effecting rotational
 movement of the shaft, and
 an oil pressure sensor positioned in fluid communication with the oil
15 passage; and,
 a control system for receiving information from the oil pressure sensor and
 providing an output signal to control operation of the electric motor when the oil
 pressure is below a predetermined level.

- 20 2. The system as recited in claim 1 wherein the control system is selected
 from at least one of an engine control unit and an electric motor controller configured
 to deactivate the electric motor when the oil pressure is below a predetermined level.

- 25 3. The system as recited in claim 1 wherein the oil pressure sensor is
 attached adjacent an oil inlet to the center housing to be in oil flow communication
 with oil entering the center housing.